

The opinion in support of the decision being entered today is not binding precedent of the board

Paper 24

UNITED STATES PATENT AND TRADEMARK OFFICE

Entered 31 March 2004

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

Ex parte DAVID F. GAVIN, GRAIG WALDRON  
ROBERT J. MARTIN and GEORGE A. POLSON

MAILED

MAR 31 2004

PAT. & T.M. OFFICE  
BOARD OF PATENT APPEALS  
AND INTERFERENCES

Appeal 2001-1647  
Application 09/120,664<sup>1</sup>

Before: WILLIAM F. SMITH, Administrative Patent Judge, and  
McKELVEY, Senior Administrative Patent Judge, and  
NAGUMO, Administrative Patent Judge.

McKELVEY, Senior Administrative Patent Judge.

**Decision on request for rehearing**

Applicants have filed a request for rehearing of our decision entered 17 December 2001. The request is denied.

**A. Background**

Applicants' request for rehearing has not been handled in an efficient manner within the Patent and Trademark Office.

1. Our decision on appeal was entered on 17 December 2001 (Paper 19); Ex parte Gavin, 62 USPQ2d 1680 (Bd. Pat. App. & Int. 2001).

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<sup>1</sup> Application for patent filed 22 July 1998. The real party in interest is Arch Chemicals, Inc. (Appeal Brief, page 2).

2. Applicants mailed a request for rehearing to the Mail Room of the Patent and Trademark Office on 15 February 2002 using a certificate of mailing pursuant to 37 CFR § 1.8(a).

3. The request for rehearing arrived in the Mail Room on 27 February 2002.

4. The request for rehearing first reached the Board of Appeals and Interferences on 8 March 2002.

5. According to the PALM records of the Patent and Trademark Office, the application file was sent to and received by Technology Center 1600/2900 on 13 March 2002, apparently before the request for rehearing had been matched at the board with the file.

6. At some point, the request for rehearing was forwarded to Technology Center 1600/2900, because it bears a Technology Center date stamp of "July 8 0 2002", which we take to mean 8 July 2002.

7. On 15 July 2002, the examiner entered a notice of abandonment (Paper 21); it would seem that the examiner believed that the application on appeal had become abandoned since no response had been timely filed to our decision.

8. The PALM records reveal that the application file was in Abandoned Files Unit for about a day from 16 July 2002 through 17 July 2002, being again received by the Technology Center on 17 July 2002.

9. The PALM records further reveal that on 1 August 2002 the application file was located in "Inventory, Fifty", which we take to mean the Central Files of the Technology Center.

10. Upon receipt of the notice of abandonment, applicants mailed to the Patent and Trademark Office on 12 August 2002 a request (Paper 22) that the holding of abandonment be withdrawn in view of the filing of the request for rehearing.

11. The request for withdrawal of the holding of abandonment reached the Patent and Trademark Office on 19 August 2002.

12. Some 574 days (ca. 1.57 years) later, on 15 March 2004, a Director of Technology Center granted applicants' request for withdrawal of the holding of abandonment (Paper 23).

13. We have no idea why (1) applicants' request for rehearing was not promptly matched with the application file or (2) why it took so long for a decision to be entered on applicants' request for withdrawal of the holding of abandonment.

14. Accordingly, on behalf of the Patent and Trademark Office, we believe it appropriate to apologize to applicants for the delay which has occurred in handling and deciding the request for rehearing.

15. The apology notwithstanding, we are unable to explain on this record why counsel for applicants did not inquire as to why it was taking so long for the Patent and Trademark Office to respond to either the request for rehearing or the request for withdrawal of a holding of abandonment.

16. While inappropriate delay by the Patent and Trademark Office as occurred here is not appropriate, likewise not appropriate is for an applicant to permit a delay to continue all the while possibly gaining patent term extension.

17. Counsel for applicants may wish to set up a tickler system so that an inquiry can be made when a response to a paper, in this case the request for withdrawal of the holding of abandonment, is not received within a reasonable time from the Patent and Trademark Office.

18. The file of the application on appeal along with the request for rehearing was received at the Board on 16 March 2004.

19. The file reached the panel for a consideration on the merits of the request for rehearing on 19 March 2004.

20. Since our receipt of the request for rehearing, we have made every effort to treat the request for rehearing with special dispatch.

**B. Correction of original finding 11**

1. Upon a sua sponte review of our original findings, we note that finding 11 (Paper 19, page 3) is not entirely correct because it omitted in paragraph [3] a reference to zinc.

2. Accordingly, we correct original finding 11 to read as follows (material in bold added):

11. Dependent claim 40, re-written in independent form reads (indentation and bracketed matter added):

A biocidal composition comprising composite particles,

- [1] each of said composite particles containing a shell and a core,
- [2] said core comprising zinc or zinc oxide or zinc selenide and
- [3] said shell comprising zinc pyrithione adduct comprising the reaction product of pyrithione with a portion of said core ~~zinc~~, zinc oxide or zinc selenide.

**C. Additional findings of fact**

The record supports the following additional findings by at least a preponderance of the evidence.<sup>2</sup>

- 1. Applicants seek rehearing of our decision affirming the examiner's rejection based on the Morris patent.
- 2. According to applicants, the "core" and "shell" of the claimed invention is not the same as the "core" and "shell" described by Morris.
- 3. In fact, it seems to be applicants' position that Morris does not describe a "core" and "shell".
- 4. For convenience of all concerned, we again set out original findings 22 through 30 (Paper 19, pages 6-7).
- 22. Applicants represent that Morris describes "a photosensitizer being 'surface coated' onto zinc oxide" (Appeal Brief, page 9).
- 23. Applicants further represent that "[w]ithin \*\*\* [Morris'] wish-list of photosensitizers is zinc pyrithione" (Appeal Brief, page 9).

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<sup>2</sup> To the extent these findings of fact discuss legal issues, they may be treated as conclusions of law.

24. Morris will confirm applicants' representations, although we are not quite sure what applicants mean by "wish-list."

25. Morris describes an antifouling coating composition which comprises zinc oxide which has been surface coated by a photosensitizer (page 1, Abstract).

26. In claim 1, Morris describes a "material" which is said to have antifouling activity comprising zinc oxide and a photosensitizer wherein the "photosensitizer is surface coated onto \*\*\* [the] zinc oxide and is selected from the group consisting of \*\*\* zinc pyrithione \*\*\*."

27. In claim 15, as part of an overall method of preventing unwanted organic growth, Morris claims a process step of surface coating zinc oxide with a photosensitizer.

28. In the descriptive portion of the patent, Morris tells us that the "material" can be made through a "preformulation step \*\*\* which involves either subliming or solvent depositing the photosensitizer over the surfaces of the colloidal zinc oxide prior to suspending the zinc oxide pigment in \*\*\* [a] vehicle" (col. 6, lines 10-14). The step is said to help ensure that the photosensitizer contacts the zinc oxide (col. 6, lines 14-15).

29. Morris describes the use of several photosensitizers, including zinc pyrithione (col. 6, lines 54 through col. 7, line 3, particularly col. 6, line 66).

30. In what appears to be an embodiment which may not involve surface coating, Morris describes the use of a mixture of zinc oxide and zinc pyrithione (col. 8, lines 25-32).

5. Applicants' contend that the language "adduct comprising the reaction product" (claims 1 and 40) is not a "process" limitation used to define their claimed product.

6. Rather applicants maintain that the language is a "product" limitation.

7. We understand applicants to contend that the zinc in the "shell" of the claimed "particles" must come from zinc which originally was in the material which ultimately ends up as being the core.

8. Applicants' specification contains numerous examples.

9. In Example 6, 10.0 grams (0.098 moles) of aluminum oxide ( $\text{Al}_2\text{O}_3$ --formula weight 101.96;  $10.0 \text{ grams}/101.96 = 0.098$  moles) is slurried with 11.8 grams (0.029 moles) of the sodium salt of 2-pyrithione.

10. There are more moles of aluminum oxide than pyrithione.

11. According to applicants, "transchelation" takes place (specification, pages 12-13; request for rehearing, page 2) and the aluminum replaces sodium to form an aluminum salt of 2-pyrithion shell around the remaining aluminum oxide.

12. Since there are more moles of aluminum oxide than pyrithione, one can at least theoretically visualize applicants' "shell" and "core" as being a core of aluminum oxide with a shell of aluminum pyrithion.

13. Other possible materials for the core are zinc (Example 19), zinc oxide (Example 20) and zinc selenide (Example 21).

14. When applicants' core is zinc oxide, given the way in which applicants describe making their particles, it is apparent that the zinc of the zinc pyrithione shell comes from zinc of zinc oxide that ends up being the zinc oxide core.

15. The zinc pyrithione apparently is made by transchelation of zinc and sodium, with the sodium being removed after transchelation.

16. The Morris particle is described as being "zinc oxide which has ben [sic--been] surface coated by photosensitizer(s)" [abstract], one specific described photosensitizer being zinc pyrithione [col. 4, line 18; col. 6, line 66; col. 7, line 7].

17. Absent further evidence, the Morris particle would appear to be a center core of zinc oxide having a surface shell coating of zinc pyrithione.

18. On this record, we cannot find that there is a difference between applicants' claimed zinc core/zinc pyrithione shell particles and Morris' particles of zinc oxide which has been surface coated with zinc pyrithione.

#### **D. Discussion**

As we pointed out in our original opinion, we have no quarrel with an applicant defining a product by the way the product is made. In our view that is exactly what applicants have done here. They attempt to define the shell by the method by which it is made, viz., a zinc pyrithione shell where the zinc comes from the zinc in the core.



Applicants suggest that "[t]he reason that it is impossible for Morris' zinc pyrithione to react with the zinc oxide is because each of these two compounds contain the same metal, namely zinc" (request for rehearing, page 2). As applicants explain there is no "driving force" to cause "transchelation" between zinc and zinc as is said to occur between zinc and sodium. Accordingly, applicants maintain that their claims require that the zinc in the zinc pyrithione come from the zinc in the zinc core, whether the core be zinc, zinc oxide or zinc selenide.

Even if we agree with applicants that their particles are made by a different manner than the method used to make Morris' particles, our difficulty is that the Morris particles prima facie appear to be the same shell and core as applicants' claimed particles. In other words, applicants may have invented a new way of making an old material, but on this record the burden has reasonably been shifted to applicants to show that their claimed product is different from that of Morris.

We continue to believe that the examiner had a reasonable basis for questioning the "novelty" of applicants' claimed particles and that it was applicants' In re Best burden to overcome the prima facie case of anticipation.

**E. Order and decision on rehearing**

For the reasons given, it is

ORDERED that the request for rehearing is denied.

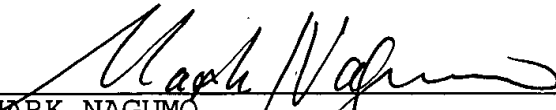
FURTHER ORDERED that no time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

REQUEST FOR REHEARING DENIED

  
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WILLIAM F. SMITH,  
Administrative Patent Judge

  
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FRED E. McKELVEY, Senior  
Administrative Patent Judge

BOARD OF PATENT  
APPEALS AND  
INTERFERENCES

  
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